

IDENTIFICATION AND DESCRIPTION OF
ENVIRONMENTAL REQUIREMENTS, CRITERIA, AND LIMITATIONS

BITTERROOT VALLEY SANITARY LANDFILL
STATE SUPERFUND FACILITY

RAVALLI COUNTY, MONTANA

RECORD OF DECISION

Montana Department of Environmental Quality

APPENDIX G

INTRODUCTION

Remedial actions undertaken pursuant to the Montana Comprehensive Environmental Cleanup and Responsibility Act (CECRA), §§ 75-10-701 through 75-10-752, Montana Code Annotated (MCA), must "attain a degree of cleanup of the hazardous or deleterious substance and control of a threatened release or further release of that substance that assures protection of public health, safety, and welfare and of the environment." Section 75-10-721(1), MCA. Additionally, the Montana Department of Environmental Quality (DEQ) "shall require cleanup consistent with applicable state or federal environmental requirements, criteria or limitations" and "may consider substantive state or federal environmental requirements, criteria, or limitations that are relevant to the site conditions." Sections 75-10-721(2)(a) and (b), MCA.

"Applicable" requirements are those that by their terms meet the jurisdictional prerequisites and apply to a given action, item or characteristic at the facility. "Relevant" requirements are those requirements that are not applicable, but address situations or problems sufficiently similar to those at the facility that they are well-suited for use at the facility.

Environmental requirements, criteria, and limitations (ERCLs) are generally of three types: contaminant-specific, location-specific, and action-specific. Contaminant-specific requirements are those that establish an allowable level or concentration of a hazardous or deleterious substance in the environment or that prescribe a level or method of treatment for a hazardous or deleterious substance. Action-specific requirements are those that are triggered by the performance of a certain activity as part of a particular remedy. Location-specific requirements are those that serve as restrictions on the concentration of a hazardous or deleterious substance or the conduct of activities solely because they are in specific locations or affect specified types of areas.

In the analysis below, federal and state contaminant-specific and action-specific requirements are presented together, because they present similar or overlapping requirements. The "Other Laws" section at the end of the ERCLs lists certain laws which are independently applicable regarding the remedial action. The "Other Laws" section is not necessarily complete, and the identification of and compliance with all other laws is the responsibility of the National Institutes of Health.

The description of applicable and relevant ERCLs which follows includes summaries of the legal requirements which attempt to set out the requirement in a reasonably concise fashion that is useful in evaluating compliance with the requirement. These descriptions are provided to allow the user a basic indication of the requirement without having to constantly refer back to the statute or regulation itself. However, in the event of any inconsistency between the law itself and the summaries provided in this document, the actual requirement is ultimately the requirement as set out in the law, rather than any paraphrase of the law provided here.

In many cases, the State has essentially adopted certain federal regulations or incorporated by reference certain federal regulations into the State regulations. In those cases, the ERCL may be listed as both federal and state requirements.

This document constitutes DEQ's formal identification and detailed description of ERCLs for remedial action at the Bitterroot Valley Sanitary Landfill CECRA Facility. This ERCLs analysis is based on § 75-10-721, MCA, § 121(d) of CERCLA, 42 U.S.C. § 9621(d); CERCLA Compliance with Other Laws Manual, Volumes I and II, OSWER Dirs. 9234.1-01 and-02 (August 1988 and August 1989 respectively); various CERCLA ARARs Fact Sheets issued as OSWER Directives; the Preamble to the Proposed NCP, 53 Fed. Reg. 51394 *et seq.* (December 21, 1988); the Preamble to the Final NCP, 55 Fed. Reg. 8666-8813 (March 8, 1990); the Final NCP, 40 CFR Part 300 (55 Fed. Reg. 8813-8865, March 8, 1990). This ERCLs analysis is also based on the provisions of law discussed in this document.

I. FEDERAL AND STATE CONTAMINANT SPECIFIC ERCLs

Causing of Pollution (Applicable)

Section 75-5-605, MCA of the Montana Water Quality Act prohibits the causing of pollution of any state waters. Section 75-5-103(21)(a)(i), MCA defines pollution as contamination or other alteration of physical, chemical, or biological properties of state waters which exceeds that permitted by the water quality standards.

Placement of Wastes (Applicable)

Section 75-5-605, MCA states that it is unlawful to place or cause to be placed any wastes where they will cause pollution of any state waters. Any permitted placement of waste is not placement if the agency's permitting authority contains provisions for review of the placement of materials to ensure it will not cause pollution to state waters.

Nondegradation (Applicable)

Section 75-5-303, MCA states that existing uses of state waters and the level of water quality necessary to protect the uses must be maintained and protected, with certain limited exceptions.

Groundwater Quality Standards (Relevant)

Because the aquifer affected by the facility is currently and has been used as a drinking water source, the maximum contaminant levels (MCLs) specified in 40 CFR Part 141 (Primary Drinking Water Standards) are relevant requirements which are ultimately to be attained by the remedy for the facility. Pursuant to the Public Water Safety Act, §§ 75-6-101 et seq., MCA and ARM 17.38.204, the MCLs specified in 40 CFR Part 141 (Primary Drinking Water Standards) are incorporated. These standards must be met for any drinking water supply unless a more stringent state standard exists. The MCLs are also an “other law” that must be met for the community water supply system.

Because the aquifer affected by the facility is currently and has been used as a drinking water source, the Secondary Maximum Contaminant Levels (SMCLs) specified in 40 CFR Part 143.3 are relevant requirements which are ultimately to be attained by the remedy for the facility. 40 CFR 143.3 contains standards for color, odor (3 threshold odor number) and corrosivity which are relevant to the remedial action. The SMCLs are also an “other law” that must be met for the community water supply system.

Montana Groundwater Pollution Control System (Applicable)

ARM 17.30.1006 classifies groundwater into Classes I through IV based upon its specific conductance and establishes the groundwater quality standards applicable with respect to each groundwater classification.

Based upon its specific conductance, the groundwater at the facility must meet the standards for Class I groundwater. These standards are applicable. Concentrations of substances in Class I may not exceed the human health standards for groundwater listed in department Circular WQB-7.¹ For the primary contaminants of concern, the Circular WQB-7 standards and MCLs are listed below. For all contaminants of concern except vinyl chloride and trihalomethanes, the MCLs and Circular WQB-7 standards are equivalent. All levels are ug/l and are dissolved phase, except as noted for iron and manganese.

¹ Montana Department of Environmental Quality, Planning, Prevention and Assistance Division, Circular WQB-7, Montana Numeric Water Quality Standards (September 1999).

Groundwater Standards

| | |
|-------------------------|------------------------|
| 1,1 Dichloroethene | 7 ug/l |
| 1,2 Dichloroethane | 4 ug/l |
| cis-1,2-Dichloroethene | 70 ug/l |
| Benzene | 5 ug/l |
| Dichlorodifluoromethane | 1,400 ug/l |
| Carbon Tetrachloride | 3 ug/l |
| Manganese | 50 ug/l ² |
| Iron | 300 ug/l ³ |
| Chloroform | 60 ug/l |
| Methylene Chloride | 5 ug/l |
| Tetrachloroethene | 5 ug/l |
| Trichloroethene | 5 ug/l |
| Vinyl Chloride | 0.15 ug/l ⁴ |
| Trihalomethanes | 100 ug/l ⁵ |

For concentrations of parameters for which human health standards are not listed in WQB-7, ARM 17.30.1006 allows no increase of a parameter to a level that renders the waters harmful, detrimental or injurious to the beneficial uses listed for Class I water.

ARM 17.30.1011 provides that any groundwater whose existing quality is higher than the standard for its classification must be maintained at that high quality unless degradation may be allowed under the principles established in § 75-5-303, MCA, and the nondegradation rules at ARM Title 17, chapter 30, subchapter 7.

Surface Water Quality Standards (Applicable)

The Montana Water Quality Act, §§ 75-5-101 et seq., establishes requirements for restoring and maintaining the quality of surface and groundwaters and the federal Clean Water Act, 33 U.S.C. §§ 1251 et seq., establishes requirements for restoring and maintaining the quality of surface waters. Under these Acts the state has authority to adopt water quality standards designed to protect beneficial uses of each water body and to designate uses for each water body. Montana's regulations classify state waters according to quality, place restrictions on the discharge of pollutants to state waters and prohibit the degradation of state waters.

2 The MCL is based on an analysis of total metals.

3 The MCL is based on an analysis of total metals.

4 The MCL is 2 ug/l.

5 The MCL is 80 ug/l.

ARM 17.30.607(1) provides that the waters of the Clark Fork River drainage, which includes the Bitterroot River, are classified "B-1" for water use.

ARM 17.30.623 provides that concentrations of carcinogenic, bioconcentrating, toxic or harmful parameters which would remain in the water after conventional water treatment may not exceed the applicable standards set forth in department circular WQB-7.

WQB-7 provides that for surface waters the Standard is the more restrictive of either the Aquatic Life Standard or the Human Health Standard. For the primary Contaminants of Concern the Circular WQB-7 standards are as follows:

Surface Water Standards

| | |
|-------------------------|------------|
| 1,1 Dichloroethene | .57 ug/l |
| 1,2 Dichloroethane | 3.8 ug/l |
| cis-1,2-Dichloroethene | 70 ug/l |
| Benzene | 5 ug/l |
| Dichlorodifluoromethane | 1,400 ug/l |
| Carbon Tetrachloride | 2.5 ug/l |
| Manganese | 50 ug/l |
| Iron | 300 ug/l |
| Chloroform | 57 ug/l |
| Methylene Chloride | 5 ug/l |
| Tetrachloroethene | 5 ug/l |
| Trichloroethene | 5 ug/l |
| Vinyl Chloride | 0.15 ug/l |
| Trihalomethanes | 100 ug/l |

The B-1 classification standards at ARM 17.30.623 also include the following criteria: (1) dissolved oxygen concentration must not be reduced below the levels given in department circular WQB-7; (2) hydrogen ion concentration (pH) must be maintained within the range of 6.5 to 9.5; (3) the maximum allowable increase above naturally occurring turbidity is 5 nephelometric turbidity units; (4) temperature increases must be kept within prescribed limits; (5) no increase is allowed above naturally occurring concentrations of sediment, settleable solids, oils, floating solids, which will or is likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish or other wildlife; and (6) true color must be kept within specified limits.

ARM 17.30.637 which prohibits discharges containing substances that will: (a) settle to form objectionable sludge deposits or emulsions beneath the surface of the water or upon adjoining shorelines; (b) create floating debris,

scum, a visible oil film (or be present in concentrations at or in excess of 10 milligrams per liter) or globules of grease or other floating materials; (c) produce odors, colors or other conditions which create a nuisance or render undesirable tastes to fish flesh or make fish inedible; (d) create concentrations or combinations of materials which are toxic or harmful to human, animal, plant or aquatic life; or (e) create conditions which produce undesirable aquatic life.

ARM 17.30.705 provides that for any surface water, existing and anticipated uses and the water quality necessary to protect these uses must be maintained and protected unless degradation is allowed under the nondegradation rules at ARM 17.30.708.

Stormwater Runoff (Applicable)

Pursuant to authority under the Water Quality Act, Title 17, Chapter 30, Sub-Chapter 6, and Title 17, Chapter 30, Sub-Chapter 13, including ARM 17.30.1332, the Permitting and Compliance Division issues general stormwater permits for certain activities. However, DEQ is exempting remedial actions conducted onsite from permit requirements pursuant to 75-10-721(3), MCA as long as the substantive requirements of DEQ's most current general discharge permit for stormwater associated with construction activity are met.

Generally, the permits require the permittee to implement Best Management Practices (BMP) and to take all reasonable steps to minimize or prevent any discharge which has a reasonable likelihood of adversely affecting human health or the environment. However, if there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with the activity, an individual MPDES permit or alternative general permit may be required.

Ambient Air Quality Standards (Applicable)

The following standards are applicable at the facility⁶:

40 CFR 50.9 and ARM 17.8.213. Ambient air quality standard for ozone. No person shall cause or contribute to concentrations of ozone in the ambient air exceeding: 0.10 ppm 1-hour average (0.12 ppm federal standard). 40 CFR 50.10 establishes a daily maximum 8-hour average 0.08 parts per million (ppm).

ARM 17.8.220. Ambient air quality standard for settled particulate matter. Particulate matter concentrations in the ambient air shall not exceed the following 30-day average: 10 grams per square meter.

40 CFR 50.6 and ARM 17.8.223. Ambient air quality standards for PM-10. PM-10 concentrations in the ambient air shall not exceed the following standards: 150 micrograms/cubic meter of air, 24-hour average; and 50 micrograms/cubic meter of air, expected annual average.

40 CFR 50.8 and ARM 17.8.212. Ambient air quality standards for carbon monoxide. Carbon monoxide concentrations in the ambient air shall not exceed the following standards: 9 ppm 8-hour average; and 23 ppm for a 1-hour average (35 ppm for federal).

Emission Standards (Applicable)

⁴ Each of the ambient air quality standards includes in its terms specific requirements and methodologies for monitoring and determining levels. Such requirements are also applicable requirements. In addition, ARM 17.8.204 and 17.8.206, Ambient Air Monitoring; Methods and Data, respectively (Applicable), require that all ambient air monitoring, sampling and data collection, recording, analysis and transmittal shall be in compliance with the Montana Quality Assurance Manual except when more stringent requirements are determined by DEQ to be necessary.

Montana has promulgated standards to regulate emissions of certain contaminants into the air. The state emission standards are enforceable under the Montana Clean Air Act, §§ 75-2-101 et seq., MCA.

ARM 17.8.304. Visible Air Contaminants. No source may discharge emissions into the atmosphere that exhibit an opacity of 20 percent or greater, averaged over six consecutive minutes. This standard is limited to point sources, but excludes wood waste burners, incinerators, and motor vehicles.

ARM 17.8.308. Airborne Particulate Matter. Emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20 percent or greater, averaged over six consecutive minutes. This standard applies to the production, handling, transportation, or storage of any material; to the use of streets, roads, or parking lots; and to construction or demolition projects.

ARM 17.8.715 requires sources for which air quality permits are required to use best available control technology (BACT) or to meet the lowest achievable emission rate (LAER), as applicable.

II. FEDERAL AND STATE LOCATION SPECIFIC ERCLs

The Endangered Species Act (Applicable)

This statute and implementing regulations (16 U.S.C. § 1531 et seq., 50 CFR Part 402, 40 CFR 6.302(h), and 40 CFR 257.3-2) require that any federal activity or federally authorized activity may not jeopardize the continued existence of any threatened or endangered species or destroy or adversely modify a critical habitat. Compliance with this requirement involves consultation with the U.S. Fish and Wildlife Service (USFWS) and a determination of whether there are listed or proposed species or critical habitats present at the facility, and, if so, whether any proposed activities will impact such wildlife or habitat. No endangered or threatened species have been identified on-site. Any action affecting federal or State endangered or threatened species must comply with all listed requirements.

Sections 87-5-106, 107, and 111, MCA (Applicable): Endangered species should be protected in order to maintain and to the extent possible enhance their numbers. These sections list endangered species, prohibited acts and penalties. See also, §§ 87-5-106 and 87-5-201, MCA, (Applicable) concerning protection of wild birds, nests and eggs.

ARM 12.5.201 (Applicable). Certain activities are prohibited with respect to specified endangered species.

Migratory Bird Treaty Act (Applicable) This requirement (16 U.S.C. § 703 et seq.) establishes a federal responsibility for the protection of the international migratory bird resource and requires continued consultation with the USFWS during remedial design and remedial action to ensure that the cleanup of the facility does not unnecessarily impact migratory birds.

Bald Eagle Protection Act (Applicable) This requirement (16 U.S.C. § 668 et seq.) establishes a federal responsibility for protection of bald and golden eagles, and requires continued consultation with the USFWS during remedial design and remedial action to ensure that any cleanup of the facility does not unnecessarily adversely affect the bald and golden eagle.

Historic Sites, Buildings, Objects and Antiquities Act (Applicable) These requirements, found at 16 U.S.C. 461 et seq., provide that, in conducting an environmental review of a proposed action, the responsible official shall consider the existence and location of natural landmarks using information provided by the National Park Service pursuant to 36 CFR 62.6(d) to avoid undesirable impacts upon such landmarks. No historic sites were identified.

Fish and Wildlife Coordination Act (Applicable) These standards are found at 16 U.S.C. § 661 et seq. and 40 CFR 6.302(g) and require that federally funded or authorized projects ensure that any modification of any stream or other water body affected by a funded or authorized action provide for adequate protection of fish and wildlife resources.

Floodplain Management Order (Applicable) This requirement (40 CFR Part 6, Appendix A, Executive Order No. 11,988) mandates that federally funded or authorized actions within the 100 year flood plain avoid, to the maximum extent possible, adverse impacts associated with development of a floodplain.

Protection of Wetlands Order (Applicable) This requirement (40 CFR Part 6, Appendix A, Executive Order No. 11,990) mandates that federal agencies and potentially responsible parties avoid, to the extent possible, the adverse impacts associated with the destruction or loss of wetlands and to avoid support of new construction in wetlands if a practicable alternative exists. Section 404(b)(1), 33 U.S.C. § 1344(b)(1), also prohibits the discharge of dredged or fill material into waters of the United States. Together, these requirements create a "no net loss" of wetlands standard.

Floodplain and Floodway Management Act and Regulations (Applicable)

A portion of the facility is in the Bitterroot River's designated floodplain. The following standards are included here to indicate the restrictions on any related activities that might occur in or affect the floodway or floodplain.

Residential, certain agricultural, industrial-commercial, recreational and other uses are permissible within the designated floodway, provided they do not require structures other than portable structures, fill or permanent storage of materials or equipment. Section 76-5-401, MCA; ARM 36.15.601.

In the flood fringe (i.e., within the floodplain but outside the floodway), residential, commercial, industrial, and other structures may be permitted subject to certain conditions relating to placement of fill, roads, and floodproofing. Section 76-5-402, MCA; ARM 36.15.701.

Domestic water supply wells may be permitted, even within the floodway, provided the well casing and well meets certain conditions. ARM 36.15.602(6).

Solid and hazardous waste disposal and storage of toxic, flammable, hazardous, or explosive materials are prohibited anywhere in floodways or floodplains. ARM 36.15.602(5), 36.15.605, and 36.15.703.

The following are prohibited in a floodway: buildings for living purposes or place of assembly or permanent use by human beings; any structure or excavation that will cause water to be diverted from the established floodway, cause erosion, obstruct the natural flow of water, or reduce the carrying capacity of the floodway; and the construction or permanent storage of an object subject to flotation or movement during flood level periods. Section 76-5-402, MCA.

Section 76-5-406, MCA and ARM 36.15.216 contain substantive factors which address obstruction or use within the floodway or floodplain.

Further conditions or restrictions that generally apply to specific activities within the floodway or floodplain can be found at ARM 36.15.604 (increase in upstream elevation or significantly increase flood velocities); ARM 36.15.602(1) (excavation of material from pits or pools); ARM 36.15.603 (water diversions or changes in place of diversion);

ARM 36.15.701(3)(c) requires that roads, streets, highways and rail lines must be designed to minimize increases in flood heights.

Structures and facilities for liquid or solid waste treatment and disposal must be floodproofed to ensure that no pollutants enter flood waters and may be allowed and approved only in accordance with DEQ regulations, which include certain additional prohibitions on such disposal. ARM 36.15.701(3)(d).

Standards applied to residential, commercial or industrial structures are found at ARM 36.15.702(2).

Flood control works are subject to ARM 36.15.606, which requires compliance with safety standards for levees, floodwalls, and riprap.

ARM 36.15.901 requires electrical systems to be flood-proofed.

III. FEDERAL AND STATE ACTION SPECIFIC REQUIREMENTS

Hazardous Waste Management Regulations (Applicable)

The Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901 et seq., and the Montana Hazardous Waste Act, §§ 75-10-401 et seq., MCA, and regulations under these acts establish a regulatory structure for the generation, transportation, treatment, storage and disposal of hazardous wastes. Certain RCRA requirements (including 40 CFR Part 261 Subpart D [listing determinations], 40 CFR Part 261 Subpart C [characteristic determinations], 40 CFR 263 [standards for transportation], 40 CFR 264 [general facility standards], 40 CFR 264 Subpart F [releases from solid waste units], 40 CFR 264 Subpart G [closure and post-closure requirements], 40 CFR 264 Subparts I and J [waste containers and tanks], 40 CFR 264 Subpart L [waste piles], 40 CFR 264.554 [staging piles], and 40 CFR 268 [land disposal restrictions]) are applicable requirements for the treatment, storage and disposal of these wastes. These requirements are applicable to substances and actions at the facility which involve the active management of hazardous wastes.

However, it is not anticipated that the required remedial actions will result in the active management of hazardous waste. Onsite source removal and treatment has already occurred as an interim action and no further soil excavation onsite is anticipated. The only excavations that will occur are excavations for laying the community water supply system lines. The excavations will occur off-site where no contaminated soil is expected to be encountered. All excavated soil will be put back into the excavation after the lines are in place. In addition, it is not anticipated that excavations will come into contact with contaminated groundwater as the groundwater begins at least ten feet below the ground surface. (Generally, lines are laid about eight feet deep in Montana to be below the frostlines in the roadways.) If hazardous waste is actively managed during remedial activities, DEQ will require that the hazardous wastes, including all media not treated to cleanup levels, be disposed off-site at a regulated subtitle C facility.

Public Water Supply (Applicable)

Sections 75-6-101 through 121, MCA (Applicable) provide public water supply requirements. The Safe Drinking Water Act (SDWA), 42 USC §§ 300f through 300j-26 is applicable; although the State of Montana has primacy for portions of the drinking water programs under federal law and it is primarily state law that must be complied with for those programs, all requirements of federal law must also be met.

Section 75-6-105, MCA (Applicable) requires that every person drilling a water well to furnish water for public consumption shall keep a complete record of the depth, thickness, and character of different strata or other information required by the Board of Environmental Review.

Section 75-6-112, MCA (Applicable) provides that it is illegal to (1) discharge drainage, industrial waste, or other wastes that will cause pollution of state waters used for domestic use or as a source for a public water supply system; (2) discharge drainage, industrial waste, or other waste into any state waters, on the banks of any state waters, or into any abandoned or operating water well unless such waste is properly treated; (3) commence construction, alteration, or extension of any system of water supply, water distribution, drainage, or wastewater disposal without DEQ approval; (4) operate or maintain any public water supply system which exceeds a maximum contaminant level; and (5) violate any legal requirement.

ARM 17.38.101 et seq. (Applicable) provide requirements for public water supply system. The community water supply system must meet all regulatory requirements for community water system under these regulations as well as under the SDWA.

Vinyl Chloride (Applicable)

40 CFR Part 61, Subpart F contains the national emission standard for vinyl chloride. 40 CFR 61.64(b) requires concentrations from vinyl chloride in each exhaust gas stream from each stripper not exceed 10 ppm.

National Pollutant Discharge Elimination System (NPDES) and the Montana Pollutant Discharge Elimination System (MPDES)(Applicable)

40 CFR Part 122, Subpart C and ARM 17.30.1342-1344 set forth the substantive requirements applicable to all MPDES and NPDES permits. DEQ is exempting remedial actions conducted onsite from permit requirements pursuant to 75-10-721(3), MCA as long as substantive requirements are met.

Technology-Based Treatment (Applicable)

40 CFR Part 125 and ARM 17.30.1344 set forth criteria and standards for dischargers. Based on the source, the technology-based treatment standards include the best practicable control technology (BPT), best conventional pollutant control technology (BCT), or best available technology economically achievable (BAT).

Solid Waste (Applicable)

The Record of Decision does not provide for any on-site disposal of any solid waste. If any solid waste is generated during remedial activities, the solid waste must be disposed off-site in a licensed solid waste facility.

For solid wastes, § 75-10-212, MCA, prohibits dumping or leaving any debris or refuse upon or within 200 yards of any highway, road, street, or alley of the State or other public property, or on privately owned property where hunting, fishing, or other recreation is permitted.

ARM 17.50.523 requires that such waste must be transported in such a manner as to prevent its discharge, dumping, spilling, or leaking from the transport vehicle.

Well Drilling (Applicable)

Section 85-2-505, MCA, precludes the wasting of groundwater. Any well producing waters that contaminate other waters must be plugged or capped, and wells must be constructed and maintained so as to prevent waste, contamination, or pollution of groundwater.

Section 85-2-516, MCA states that within 60 days after any well is completed a well log report must be filed by the driller with the Montana Department of Natural Resources and Conservation and the appropriate county clerk and recorder.

ARM 17.30.641 provides standards for sampling and analysis of water to determine quality.

ARM 17.30.646 requires that bioassay tolerance concentrations be determined in a specified manner.

ARM 37.21.801-809 specifies certain requirements that must be fulfilled when constructing monitoring wells.

ARM 36.21.670-678 and 810 specifies certain requirements that must be fulfilled when abandoning monitoring wells.

Reclamation Requirements (Relevant)

Certain portions of the Montana Strip and Underground Mining Reclamation Act and Montana Metal Mining Act are relevant requirements for certain revegetation and construction activities at the facility.

Section 82-4-231, MCA: Requires operators to reclaim and revegetate affected lands using most modern technology available.

Section 82-4-233, MCA: Operators must plant vegetation that will yield a diverse, effective, and permanent vegetative cover of the same seasonal variety native to the area and capable of self-regeneration.

Section 82-4-336, MCA: Disturbed areas must be reclaimed to utility and stability comparable to areas adjacent.

ARM 17.24.501: Provides general backfilling and grading requirements.

ARM 17.24.519: Pertinent areas where excavation will occur will be regraded to minimize settlement.

ARM 17.24.631: Disturbances to the prevailing hydrologic balance will be minimized. Changes in water quality and quantity, in the depth to groundwater and in the location of surface water drainage channels will be minimized, to the extent consistent with the selected response alternatives. Other pollution minimization devices must be used if appropriate, including stabilizing disturbed areas through land shaping, diverting runoff, planting quickly germinating and growing stands of temporary vegetation, mulching, and control of toxic-forming waste materials.

ARM 17.24.633: Surface drainage from a disturbed area must be treated by the best technology currently available (BTCA). Treatment must continue until the area is stabilized.

ARM 17.24.634: Disturbed drainages will be restored to the approximate pre-disturbance configuration, to the extent consistent with the selected response alternatives.

ARM 17.24.638: Sediment control measures must be implemented during operations.

ARM 17.24.639: Sets forth requirements for construction and maintenance of sedimentation ponds.

ARM 17.24.640: Discharges from sedimentation ponds, permanent and temporary impoundments, must be controlled to reduce erosion and enlargement of stream channels, and to minimize disturbance of the hydrologic balance.

ARM 17.24.643 through 17.24.646: Provisions for groundwater protection, groundwater recharge protection, and groundwater and surface water monitoring.

ARM 17.24.701 and 702: Requirements for redistributing and stockpiling of soil for reclamation. Also outline practices to prevent compaction, slippage, erosion, and deterioration of biological properties of soil will be employed.

ARM 17.24.711: Requires that a diverse, effective and permanent vegetative cover of the same seasonal variety and utility as the vegetation native to the area of land to be affected must be established. This provision would not be well-suited in certain instances, for example, where there is dedicated development.

ARM 17.24.713: Seeding and planting of disturbed areas must be conducted during the first appropriate period for favorable planting after final seedbed.

ARM 17.24.714: Mulch or cover crop or both must be used until adequate permanent cover can be established.

ARM 17.24.716: Establishes method of revegetation.

ARM 17.24.718: Requires soil amendments, irrigation, management, fencing, or other measures, if necessary to establish a diverse and permanent vegetative cover.

ARM 17.24.723: States that operators shall conduct approved periodic measurements of vegetation, soils, and water.

ARM 17.24.724: Specifies that revegetation success must be measured by approved unmined reference areas. Required management for these reference areas is set forth.

ARM 17.24.726: Sets the required methods for measuring productivity.

ARM 17.24.728: Sets requirements for measurements of the composition of vegetation on reclaimed areas.

ARM 17.24.761: This specifies fugitive dust control measures which will be employed during excavation and construction activities to minimize the emission of fugitive dust.

Noxious Weeds (Applicable)

Section 7-22-2101(7)(a), MCA defines "noxious weeds" as any exotic plant species established or that may be introduced in the state which may render land unfit for agriculture, forestry, livestock, wildlife, or other beneficial uses or that may harm native plant communities and that is designated: (i) as a statewide noxious weed by rule of the department; or (ii) as a district noxious weed by a board, following public notice of intent and a public hearing. Designated noxious weeds are listed in ARM 4.5.201 through 4.5.204 and must be managed consistent with weed management criteria developed under § 7-22-2109(2)(b), MCA. Section 7-22-2152, MCA requires that any person proposing certain actions including but not limited to a solid waste facility, a highway or road, a commercial, industrial, or government development, or any other development that needs state or local approval and that results in the potential for noxious weed infestation within a district shall notify the district weed board at least 15 days prior to the activity. The board will require that the areas be seeded, planted, or otherwise managed to reestablish a cover of beneficial plants. The person committing the action shall submit to the board a written plan specifying the methods to be used to accomplish revegetation at least 15 days prior to the activity. The plan must describe the time and method of seeding, fertilization practices, recommended plant species, use of weed-free seed, and the weed management procedures to be used. The plan is subject to approval by the board, which may require revisions to bring the revegetation plan into compliance with the district weed management plan. The activity for which notice is given may not occur until the plan is approved by the board and signed by the presiding officer of the board and by the person or a representative of the agency responsible for the action. The signed plan constitutes a binding agreement between the board and the person or agency. The plan must be approved, with revisions if necessary, within 10 days of receipt by the board.

IV. OTHER LAWS

These laws are laws which are independently applicable rather than ERCLs for the facility.

Surface Water and Groundwater Act

Section 85-2-101, MCA, declares that all waters within the state are the state's property, and may be appropriated for beneficial uses. The wise use of water resources is encouraged for the maximum benefit to the people and with minimum degradation of natural aquatic ecosystems.

Community Water Supply System

The community water supply system must meet all regulatory requirements for a “community water system” under the Administrative Rules of Montana, Title 17, Chapter 38, and the federal Safe Drinking Water Act, including the MCLs specified in 40 CFR Part 141 (Primary Drinking Water Standards) and SMCLs specified in 40 CFR Part 143.3.

Groundwater and Surface Water Appropriation

Parts 3 and 4 of Title 85, Chapter 2, MCA, set out requirements for obtaining water rights and appropriating and utilizing water. All requirements of these parts are laws which must be complied with in any action using or affecting waters of the state.

Controlled Groundwater Area

Pursuant to § 85-2-507, MCA, the Department of Natural Resources and Conservation (DNRC) may grant either a permanent or a temporary controlled groundwater area. The maximum allowable time for a temporary area is four years. If a temporary controlled groundwater area is granted, the statute requires DNRC to commence studies to determine the designation or modification of a permanent controlled groundwater area.

Pursuant to § 85-2-506, MCA, designation of a controlled groundwater area may be proposed if

(a) that groundwater withdrawals are in excess of recharge to the aquifer or aquifers within the groundwater area; (b) that excessive groundwater withdrawals are very likely to occur in the near future because of consistent and significant increases in withdrawals from within the groundwater area; (c) that significant disputes regarding priority of rights, amounts of groundwater in use by appropriators, or priority of type of use are in progress within the groundwater area; (d) that groundwater levels or pressures in the area in question are declining or have declined excessively; (e) that excessive groundwater withdrawals would cause contaminant migration; (f) that groundwater withdrawals adversely affecting groundwater quality within the groundwater area are occurring or are likely to occur; or (g) that water quality within the groundwater area is not suited for a specific beneficial use defined by 85-2-102(2)(a).

Human Skeletal Remains and Burial Site Protection Act (Applicable) This act (§§ 22-3-801 et seq., MCA) requires that a person who discovers human skeletal remains, a burial site, or burial material through ground-disturbing activity immediately notify the county coroner and cease activity until the requirements of the act are met.

Occupational Safety and Health Act

The federal Occupational Safety and Health Act regulations found at 29 CFR 1910 are applicable to worker protection during conduct of remedial activities.

Montana Occupational Health Act

ARM 17.74.101, along with the similar federal standard in 29 CFR 1910.95, addresses occupational noise.

ARM 17.74.102, along with the similar federal standard in 29 CFR 1910.1000, addresses occupational air contaminants.

Montana Safety Act

Sections 50-71-201, 202 and 203, MCA, state that every employer must provide and maintain a safe place of employment, provide and require use of safety devices and safeguards, and ensure that operations and processes are reasonably adequate to render the place of employment safe.

Employee and Community Hazardous Chemical Information Act

Sections 50-78-201, 202, and 204, MCA, state that each employer must post notice of employee rights, maintain at the work place a list of chemical names of each chemical in the work place, and indicate the work area where the chemical is stored or used. Employees must be informed of the chemicals at the work place and trained in the proper handling of the chemicals.

Standards for Generators of Hazardous Waste

The RCRA regulations at 40 CFR Part 262 and ARM 17.53.601-604 establish standards that apply to generators of hazardous waste. These standards include requirements for obtaining an EPA identification number and maintaining certain records and filing certain reports. These standards are applicable for any waste which will transported off-site.
